Marine Transportation System
National Advisory Council

2009 Report to
Secretary of Transportation

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Introduction

This report was developed as a consensus summary of meaningful actions that the federal government should take to improve the Marine Transportation System (MTS).

The original objective of the 2008 report development effort was to update the 2006 Report to the Secretary from the MTSNAC Intermodal Committee. That report was significant because it demonstrated that the MTS and intermodal systems were permanently intertwined and that the scope of the MTS did not stop at the water’s edge.

In 2008, the MTSNAC tasked its Intermodal Committee with developing an update to the 2006 Report. The Intermodal Committee convened several times and developed a list of recommendations to be included in the update. The full MTSNAC approved the initial recommendations but suggested that more actions were needed.

The Intermodal Committee agreed to draft a broader report and collaborated with MTSNAC members and other interested stakeholders to develop its content. The result is that the 2008 Report is much broader in scope than an update to the 2006 Intermodal Report and reflects the scope and complexity of the MTS.

After numerous iterations, and more than six draft reports, the final report was endorsed by the Intermodal Committee and distributed to the full MTSNAC for approval.

The full MTSNAC approved this report in January 2009.

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See page 40 for a full listing of MTSNAC Members.
About the Marine Transportation System

*The Marine Transportation System is critical to the economic vitality and national security of the United States.*

The MTS represents all of the nation’s inland and coastal waterways, the Great Lakes, harbors, ports and marine terminals as well as all the vessels operating in these waters. Additionally, the MTS includes the critical land-side connections to ports and marine terminals, including roads, bridges, railways and pipelines. The MTS is a critical component of our nation’s transportation system and is best viewed and considered as part of the whole. The MTS is by definition multi-modal and therefore requires solutions that are holistic, incorporating the needs of all modes.

The MTS has multiple owners, which are described on page 34. The public sector owns the nations’ waterways and highways; the private sector has invested in and owns most of the rail, truck and maritime shipping capacity; private railroads own most of the rail infrastructure; the public and private sector jointly own or operate most of the port terminal infrastructure; mostly private parties own the freight moving throughout the MTS and therefore they dictate how and when the freight should move. Lastly, the land-side movement of MTS traffic, both freight and passenger, generally takes place on the same roads, bridges and railways handling the non-MTS traffic, which represents considerably more volume.

Within the public sector, responsibility is highly fragmented and modal separation at the federal level remains. Other components are managed by states and local governments. The Committee on the Marine Transportation System (CMTS) was created to help address the issue of fragmented responsibility at the federal level.

Given the complexity of the MTS, it is difficult to quantify its size however there are some key metrics that outline its scope:
- Number of U.S. commercial ports: 360<sup>1</sup>
- Number of locks and dams: 241<sup>2</sup>
- Annual volume of freight: 2.5 billion tons<sup>3</sup>
- Annual number of passengers on ships: 10.29 million<sup>4</sup>
- Annual number of passengers on ferries: 120 million<sup>5</sup>
- Number of intermodal freight terminals: 616
- Annual Cargo Vessel Calls: 63,804
  - Container: 19,863
  - Ro-Ro: 6,077
  - Dry Bulk: 11,040
  - Tanker: 21,724
  - All other: 5,100
- Annual Passenger Vessel Cruises: 4,464

The Marine Transportation System is vital to our economic and national security interests.

In 2007, commercial port activities, which are at the heart of the MTS employed (directly or indirectly) more than 13.3 million Americans, including nearly 12 million who were employed in exporter/importer-related businesses and support industries throughout the U.S. Business activities related to waterborne commerce contributed approximately $3.15 trillion overall to the U.S. economy, and those same businesses paid nearly $212.5 billion in federal, state and local taxes. Seaport activities alone in 2007 accounted for $31.2 billion in federal, state and local tax revenues.<sup>7</sup>

In addition to the critical role that the MTS plays in the economy, it is also vital to our national security interests. The U.S. military uses the same port facilities and land-side connections as the commercial sector and often makes use of ships, trains and trucks operated by the private sector.

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<sup>1</sup> [http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=1022&navItemNumber=901](http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=1022&navItemNumber=901)
<sup>5</sup> Passenger Vessel Association cites 100 million on public ferries and 20 million+ on private ferries.
<sup>7</sup> [http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=1032&navItemNumber=1034](http://www.aapa-ports.org/Industry/content.cfm?ItemNumber=1032&navItemNumber=1034)
Recommendations for Improving the MTS

The MTSNAC offers twelve recommendations and supporting actions that the federal government should take to improve the efficiency, expand the capacity, and sustain the viability of the MTS.

Summary of Recommendations and Supporting Actions

A detailed discussion of each recommendation and supporting actions follows this section and begins on page 8.

1. Enable timely, consistent and accurate measurement of capacity and productivity of the MTS.
   - Support data collection, analysis and MTS measurement with appropriate funding and oversight
   - Use the Federal Highway Administration’s (FHWA) Freight Analysis Framework (FAF) and annual Freight Facts & Figures Report as templates
   - Select a single data inventory for MTS data
   - Complete and maintain the Maritime Administration’s (MARAD) Port & Terminal database
   - Implement recommendations from MARAD’s Data Gap Analysis report
   - Integrate the Maritime Data Working Group of the Bureau of Transportation Statistics (BTS) into the CMTS Maritime Data Integrated Action Team and develop a single list of facts about the MTS

2. Protect MTS reliability by supporting the maintenance of freight infrastructure.
   - Engage CMTS colleagues to re-examine the federal evaluation process for the economic value of inland waterways projects
   - The Harbor Maintenance Trust Fund (HMTF) must be used for its intended purpose
• Give port-related projects priority over other uses for waterfront and brown-field acreage

• Catalogue existing brown-field sites for possible conversion to support freight movement

• Use the CMTS to clear regulatory impediments to site conversion

3. Continue to recognize and support regional freight solutions.

• Use CMTS to review MTS components for inclusion in the Projects of National and Regional Significance (PNRS) program

• Invite submission of regional plans for each of the major freight gateways

• Retain new programs added in SAFETEA-LU in next surface transportation authorization bill

4. Support the efforts of the private sector to improve the efficiency of the system.

• Recognize the importance of the private sector role in the MTS when developing and implementing a national transportation policy

5. Encourage private sector investment in the MTS by retaining and advancing programs that work well and eliminating those that do not.

• Maintain federal ship financing program, a.k.a. Title XI

• Implement expanded application of the Capital Construction Fund (CCF) program for use with new short-sea shipping vessels

• Ensure Private Activity Bonds (PAB) are available for SmartWay Upgrade Kits for diesel trucks

• Ensure the Transportation Infrastructure Finance and Innovation Act (TIFIA) program is put to full, productive use in support of the MTS requirements

• Ensure final regulations make Railroad Rehabilitation & Improvement Financing (RRIF) loan program easier for the railroads to use

6. Support efforts to recruit, train and retain sufficient personnel throughout the MTS network.

• Launch a national public relations effort to support recruitment
- Include a formal path to employment in the metrics used by the DOT to evaluate the likelihood of success and the suitability of funding for training programs
- Identify technical course and trade schools
- Consider creation of a workforce development group and/or a workforce development department
- Support transportation apprenticeship programs
- Support focused regional training

7. Reduce the environmental impact of the marine transportation system.

- Streamline and expedite the Environmental Impact Review (EIR) and permitting processes
- Establish uniform, environmentally effective, national regulations based on international standards where applicable
- Evaluate the potential to use alternative energy sources
- Pursue advanced engine and fuel technology alternatives
- Increase opportunities for stewardship in project development and approval
- Identify and promote Best Management Practices
- Identify and encourage smart planning approaches like the concept of a freight village

8. Support the continued development of a marine highway system as it will be needed to accommodate future freight and passenger volume.

- Conduct a quantitative evaluation of market demand and identify economically viable short-sea shipping routes
- Identify system weaknesses that discourage efficient use of maritime transportation
- Exempt intermodal cargo moving between U.S. ports and between U.S. ports and Canada from the Harbor Maintenance Tax
- Allow states and multi-state entities to designate water routes as part of the national highway system
- Encourage states and Metropolitan Planning Organizations (MPO) to consider feasibility of parallel water routes
- Support training of transportation planners and engineers to understand water solutions
- Give MARAD resources necessary to undertake the short-sea transportation mission
- Develop strategies for increasing traffic on the inland waterways
- Encourage short-term incentives for use of water routes
- Fund Title XI and encourage use of CCF funds for the building of U.S. ships to serve this market
- Establish a freight ferry program
- Create a consultation board that includes a broad range of stakeholders

9. Assert federal jurisdiction over interstate and foreign commerce and provide transportation service providers with single, national standards and regulations.

- Implement Roadability Regulations as scheduled
- Ensure uniform national environmental standards are in place for equipment used to handle and transport goods on the MTS
- Ensure states adhere to national standards and are preempted from taking individual actions
- Monitor TWIC implementation to ensure that it does not disrupt the flow of commerce

10. Ensure the sustainability of intermodal connectors.

- Develop a comprehensive picture of the national freight system, including connectors
- Identify the most important intermodal connectors for the nation and ensure the needs of those connectors are addressed in state transportation plans
- Ensure future intermodal connectors are defined and funded before major infrastructure projects proceed
- Encourage stakeholders to increase utilization of the existing system
- MARAD Gateway Offices should identify and work to resolve local ordinances that impede increased utilization of the existing system

- Encourage improvements to on-dock rail

11. Re-establish the Office of Intermodalism within the Office of the Secretary of Transportation and hire modal freight specialists within the Office of Policy to support the effort.

- Move it out of the Research and Innovative Technology Administration (RITA) and place it in the Office of the Secretary (OST), with appropriate funding

- Develop the report required in SAFETEA-LU

- Develop the common measures directed by SAFETEA-LU

- Designate the new office as the owner of the Projects of National and Regional Significance (PNRS) program, the projects of which must be prioritized by the Secretary

- Develop a comprehensive picture of the nation’s freight system, including intermodal connectors

- Designate the new office as the owner of the National Freight Policy framework

12. Re-energize and complete the National Freight Policy framework and implement such a policy so that it supports the long-term sustainability and growth of goods movement.

- Re-activate in the newly defined Office of Intermodalism

- Continue to engage MTS stakeholders through MTSNAC and other venues

- Require states to include the maritime sector in their transportation plans

In a discussion of funding the MTS, which begins on page 35, the MTSNAC offers some principles to guide the funding debate.

Members of the MTSNAC recognize that this is by no means an exhaustive list of all the actions necessary to maintain, improve and preserve the nation’s Marine Transportation System. However, it represents a concise list of actions than can produce meaningful results. It also represents the consensus view of some thirty organizations that study, utilize or own components of the MTS.
Recommendation 1: Enable timely, consistent and accurate measurement of capacity and productivity of the MTS.

Our previous report maintained that “You can’t manage what you can’t measure” and highlighted that there are no metrics commonly available to objectively measure capacity and productivity of the MTS. The public and private sectors do not really know how much additional volume can be handled before the system effectively collapses. The MTS requires a multi-modal view and benefits little from the traditional silo approach of measuring capacity and productivity by single mode of transport. While some progress has been made, there is still much work to do in this area and the MTSNAC strongly urges the Secretary to support transportation data collection, analysis and MTS measurement with appropriate funding and oversight.

There was an expectation that the creation of the Research and Innovative Technology Administration (RITA) would help overcome the silo approach to data, statistics and ultimately performance measurement that had plagued the US Department of Transportation in the past. Although we understand that the Bureau of Transportation Statistics (BTS) within RITA has recently hired one MTS specialist, the effort is woefully underfunded. The Federal Highways Administration (FHWA) Office of Freight Management and Operations has expanded its view beyond highways and tracks key metrics for all modes, using multiple sources in its annual Freight Facts and Figures Report. We recommend that this work continue.

Additionally, FHWA has developed the Freight Analysis Framework (FAF), which “integrates data from a variety of sources to estimate commodity flows and related freight transportation activity among states, regions, and major international gateways.” We believe the FAF should serve as a department-wide template and platform. As strongly as we advocate for better information about the MTS, we also advocate that such information be developed efficiently. Therefore, we urge the Secretary to bring the FHWA’s FAF to the CMTS and recommend use of the template and platform for consistency. Other departments should be directed to collaborate on and use the FAF and not waste valuable time and resources creating other databases for essentially the same purpose.

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In recent months, the CMTS launched the *MTS Data Inventory*,\(^9\) which is helpful in providing a consolidated inventory of data sources that can be used to evaluate the MTS. This Data Inventory has 147 different federal government sources of information about the MTS, which only emphasizes the complexity in effectively measuring it.

Shortly thereafter, the Maritime Administration (MARAD) launched *MarView*, which is an on-line tool that “collects stores and displays data on the MTS.”\(^10\) It houses hundreds of data sources and external links.

These efforts to consolidate the numerous information sources on the MTS are commended; however it is unclear why two data inventories for the same purpose are in use. Further, neither source has long term value unless it is maintained. **Therefore, we urge the Secretary to select one data inventory for MTS data and assign the necessary resources to maintain it.**

Unfortunately, with all the data sources now identified, we are still lacking current, comprehensive information about the nation’s ports and terminals. Acting on part of a recommendation offered in the previous MTSNAC Intermodal Committee Report, MARAD embarked upon an initiative, in consultation with MTSNAC members to develop a *Port and Terminal Database*. This database would create an inventory of available marine terminals and key operating capabilities for most of the nation’s ports. **The MTSNAC strongly recommends that the Port and Terminal Database be completed; that there be consultation with other subject matter experts within the US Army Corps of Engineers (USACE) who have undertaken such efforts in the past and that a process and appropriate funds for maintaining the database are approved.**

The MTSNAC members understand that assembling data is a first step toward achieving the much needed objective of measuring the capacity and productivity of the MTS, and therefore commends the CMTS members, MARAD and others for undertaking these initiatives. However, there remains a gap between the gathering of data and translating that data into key information about the MTS.

Recognizing this, MARAD embarked on a *Data Gap Analysis* to identify plausible metrics for the MTS, evaluate whether

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\(^9\) [http://marapps.dot.gov/mts/search.do](http://marapps.dot.gov/mts/search.do)

appropriate data exists for those metrics and make recommendations for closing the gaps.

The original *Data Gap Analysis Report* included a number of specific recommendations, including assignment of ownership for implementation. **It is critical that these recommendations be acted upon or the more-than one year effort will be for naught.**

Additionally, **the Maritime Administration should share this information with its federal MTS partners through the CMTS Maritime Data Integrated Action Team.**

Lastly, we recommend that **the Maritime Data Working Group of BTS be integrated into the CMTS Action Team and then jointly develop a list of agreed-upon facts related to the MTS to eliminate discrepancies between federal agencies regarding MTS facts and figures.**

**Recommendation 2: Protect MTS reliability by supporting the maintenance of freight infrastructure.**

Now is the time to preserve today’s transportation capacity for tomorrow. There is considerable transportation infrastructure already in place in the U.S. Railways, waterways, highways and pipelines linking the Marine Transportation System serve as the domestic arteries for moving the nation’s 2.5 billion tons of waterborne commerce. The challenge is to maintain these assets to secure capabilities for future growth.

The inland waterways are a case in point. Some have advocated that we should postpone certain maintenance or investment because the current cost/benefit analysis process produces less than favorable results. That same process has been criticized as an inappropriate measure of the value of these projects and therefore perhaps the process should be re-evaluated. In the interim, there is no viable alternative to the inland waterways network that integrates with rail and highway transportation as well as pipelines.

If these critical waterways fall into disrepair due to maintenance neglect, how will we ever recover this capacity? It will cost too much and take too long to return the system to service. Furthermore, the other modes are not likely alternatives to carry the displaced tonnage. To do so would increase cost, environmental impact and create significant disruption to cargo flow.

**Therefore, the MTSNAC urges the Secretary to engage CMTS colleagues to reexamine the way the federal government**
evaluates the economic worth of these inland waterways projects to ensure that sound economic principles are applied and thereby ensure that this critical MTS component is adequately maintained.

Harbor Maintenance of the federal channels for dredging and disposal is another area where federal investment falls short of the need. However, in this case, there is no lack of available funds. The Harbor Maintenance Trust Fund (HMTF) was established in 1986 to assure the availability of funding by levying a tax on cargo. Federal budgets and appropriations have persistently allocated funds at levels well under the annual need for maintenance dredging but that has not been due to inadequate tax receipts. Spending of trust fund monies has ranged from 50 to 60 percent of the rate of collected revenues. The unused trust fund revenues are projected to amount to more than $4.5 billion in fiscal year 2009 and well over $6 billion by 2010. It seems as if the Federal government is failing to honor the intent of the Trust Fund and has come to rely on the fund as a generic source of tax revenue, including use for deficit reduction.

The HMTF should be able to fund the nation’s most critical needs for maintenance dredging of the coastal port system. Therefore, the Secretary is urged to seek the endorsement of the CMTS to use the HMTF for its intended purpose.

A third major MTS asset that requires protection is the waterfront – the land adjacent to harbors. Port-related activity should be given priority over other uses for waterfront and brown-field acreage. Most major freight facilities are located near major metropolitan areas. Port, rail, and trucking terminals must contend with other interests for necessary real estate. Just as we should maintain harbors and waterways for future growth, we need to preserve the landside access to those harbors and waterways for future growth.

We note that several years ago, the U.S. Chamber recommended that “existing brown-field sites should be catalogued for possible freight conversion, and a fast-track, preapproval status should be developed for those sites with high freight potential.” The MTSNAC has consistently endorsed this recommendation and raises it again and asks the Secretary to work with the states to ensure such cataloging is appropriately addressed in their planning.

A commendable example is the Portfields Initiative that was implemented by the Port Authority of New York & New Jersey and the New Jersey Economic Development Authority. Using set criteria the agencies identified underutilized former industrial sites in the port district that could be redeveloped for productive port and logistics industry use. The program includes assistance to help remove
environmental and other development impediments facing developers through either technical or financial assistance. Noting that the Portfields program once initiated by NOAA no longer exists, the MTSNAC urges the Secretary to use the interagency forum of the CMTS to coordinate an appropriate Federal initiative that could include the clearing of regulatory impediments to the use of these properties for maritime freight purposes.

**Recommendation 3: Continue to recognize and support regional freight solutions.**

The components of the Marine Transportation System are quite diverse. There is significant concentration of freight and passenger traffic through a limited number of gateways. For example, the top 10 departure ports for passenger cruises account for 77 percent of the total passengers and the top 10 ports for international container trade account for 87 percent of all container movements. In many cases, the same port is located on both lists and each of the ten ports is serving densely populated regions already experiencing congestion.

Despite similar congestion trends, no two network nodes face identical challenges. It has been well demonstrated that the challenges faced by and the solutions that have been implemented for the Los Angeles/Long Beach gateway and surrounding region are very different from those that might be used for the New York/New Jersey region. The approach used in one case would not work in the other. Therefore, solutions must be developed for the unique problems facing each gateway and its surrounding region.

SAFETEA-LU, the last federal surface transportation act, recognized these differences by authorizing the Secretary to establish new criteria to distinguish Projects of National and Regional Significance (PNRS). It also designated certain corridors as “High Priority Corridors on the National Highway System.” Additionally, specific projects funded in other sections of the legislation address needs in a local or regional area, which will ultimately benefit freight transportation nationwide. This is the foundation we should utilize to build the national freight transportation system and by which chokepoint solutions and new capacity enhancements at major gateways can be undertaken with some sense of priority. The major gateways, challenged by metropolitan congestion, increasing cargo flows, and distribution center development, contain the sum of all problems. Yet, they also represent the opportunity to create new solutions to the benefit of the country.

The MTSNAC congratulates DOT for publishing a final rule on the Projects of National and Regional Significance (PNRS) program in
October 2008 (23 CFR 505) and we are hopeful that the publication of these regulations will help ensure that only those projects meeting the specified criteria receive funding. **We recommend that the CMTS be used as a venue by which MTS components can be reviewed for inclusion in the PNRS program.**

The current freight transportation projects and programs fall far short of what the nation needs to sustain its economic growth and vitality. In some locations, the existing freight transportation system is operating so close to capacity that any significant disruption at a major gateway or along certain corridors cannot be easily absorbed by the remaining components of the system.

**Therefore, the MTSNAC recommends that the Secretary invite submission of regional plans for each of the major freight gateways that address the region’s intermodal freight system’s needs. The Secretary should also consider any inter-regional plans that hold promise for enhancing the national system capacity. The Secretary should request that such plans include regional public-private initiatives to increase system capacity and efficiency and short term actions that the parties can achieve in 3-5 years to eliminate bottlenecks and make efficient use of existing capacity. Such plans should be developed collaboratively between the modes and agencies outside the MTS if needed.**

It is anticipated that the forthcoming plans would recognize characteristics and challenges unique to each region. For example, one region may have access to river and ocean waterways that afford it a waterborne solution while another has rail access that needs to be maximized. While the plans may differ, the outcome is the same: more capacity, less congestion, and the formation of meaningful public-private partnerships.

The new programs in SAFETEA-LU appear to provide adequate latitude to incorporate these regional planning projects into the framework of the current law. **The Secretary should work to ensure that the next surface transportation authorization bill retains these programs with related latitude for regional plans and that allocated funds remain available.**

**Recommendation 4: Support the efforts of the private sector to improve the efficiency of the system.**

Private investment in supply chain infrastructure plays a key role in the overall distribution network which includes imports, exports and inland movements of freight within the USA as well as across borders. Key drivers in the supply chain are delivering the right product in the right quantity to the right destination at the right time. Satisfying these
customer needs requires robust physical infrastructure for efficient rail and truck operations, and terminals for inland waterways and ocean shipments. It also requires distribution centers and warehouses. Coordinating the flow of goods in order to meet customer expectations is made possible with the extensive use of Information Technology (IT) tools without which deliveries would stop.

For example, private investment in Enterprise Resource Planning (ERP) and warehouse and transportation management tools runs in the billions of dollars each year. These are the basic tools that allow businesses to schedule shipments, and to keep commerce flowing. They also provide information so trucks can be routed in a way that conserves fuel, reduces the carbon footprint and meets pickup and delivery schedules. The Cold Food Chain requires equipment that can maintain proper temperatures. They must constantly manage, monitor and report, either conditions in a temperature-controlled container or a million square foot, perishable goods, distribution center. No modern delivery system can afford to be without continually updated information technology.

The private sector has made significant capital commitments. Most of the vessels operating on the MTS are privately owned and it is estimated that the capital cost to replace the fleet of ships currently serving the U.S. international container trade alone would exceed $100 billion. Additionally, carriers serving U.S. international container trade are spending approximately $100 billion a year, every year, to operate those services. Private investment in passenger ships, barges, bulk carriers, tankers, railcars and track, trucks and terminals represent billions more.

Further, most of the marine terminals at deep-sea ports are privately operated, representing hundreds of millions of dollars of investment in landside buildings, equipment and operating technology. And the direct providers of marine transportation services are not the only private companies investing in the nation’s MTS.

U.S. freight railroads operate almost exclusively on infrastructure that they build, maintain, and pay for themselves. In fact, U.S. freight railroads today typically invest $18 billion to $20 billion per year on capital spending and maintenance expenses related to their infrastructure and equipment, and many billions more for operations. The U.S. trucking industry spends about $600 billion a year to transport the nation’s freight and estimates that there are some 350,000 trucks serving U.S. ports at a replacement cost of $100,000 per truck or $35 billion.
And, it is not just the transportation service providers that are investing in the MTS. Many large companies successfully own and operate their own intermodal facilities due to their concentration of volume at a single location. Chemical and agribusiness enterprises own freight railcars and barge loading operations. The millions of dollars invested in these facilities provide the capability to move large volumes of freight in short time periods.

Private entrepreneurs have begun to establish these types of facilities in order to combine volumes from several small and medium-size companies. This provides those companies with similar economies of scale as those achieved by larger companies. Small, independent barge loading facilities have sprung up along the Mississippi River. Some have even moved from the traditional bulk barge to container on barge. One successful venture is Fullen Dock and Warehouse in Memphis, TN. It began operations in conjunction with Osprey Lines to move empty containers for ocean carriers up and down the Mississippi.

One of the most successful examples of private sector investment has been in the development of massive logistics parks opening up across the US. Railroads, private developers, ocean carriers and shippers have invested billions of dollars in building and operating these massive regional distribution facilities. They normally provide services to the large populations within a 500 mile radius. Thousands of containers move on hundreds of trains each day. They service facilities in Dallas, Chicago, Kansas City, Memphis and other cities. The economies of volume density, consistent service, and competition between railroads in these corridors have allowed thousands of trucks to be removed from the highways. Some of the railroad terminals have been moved from congested areas in the city to less populous areas on the outskirts.

As evidenced above, the private sector continues to expend hundreds of billions of dollars on the MTS and any national policy must recognize and continue to encourage that private sector contribution. The MTSNAC requests that the Secretary develop and implement a cohesive, national transportation policy that recognizes the importance of the private sector role in the MTS.

**Recommendation 5: Encourage private sector investment in the MTS by retaining and advancing programs that work well.**

One of the ways to encourage continued private sector contribution is to ensure that programs put in place for that purpose are retained, funded and utilized. The MTSNAC has identified a few valuable programs supporting private investment in the MTS, which are outlined below.
- The Federal Ship Financing Program (Title XI) provides loan guarantees from the United States government to promote the growth and modernization of the U.S. merchant marine and U.S. shipyards. The program provides financing for the construction, reconstruction or recondition of vessels in U.S. shipyards for the purpose of maintaining and expanding shipbuilding technology and the U.S. shipyard industrial base. **Therefore, the Title XI program should be maintained with adequate and predictable funding.**

- The Capital Construction Fund Program was created to assist owners and operators of U.S.-flag vessels in accumulating the large amounts of capital necessary for the modernization and expansion of the U.S. merchant marine. The program encourages the construction, reconstruction, and conversion of vessels in U.S. shipyards through the deferment of Federal income taxes on certain deposits of money or other property placed into a CCF account. The Energy Independence and Security Act of 2007 amended the CCF Program to allow the use of the estimated billions in tax deferred dollars to be spent on building short sea transportation trade vessels for the Marine Highway System. **The MTSNAC supports the expanded application of the CCF Program.**

- SAFETEA-LU amended section 142 of the Internal Revenue Code to add transportation related projects to the types of projects for which tax exempt Private Activity Bonds (PAB) may be issued, and allocated $15 billion to this program. Changes include tax exempt financing of privately owned or operated highway projects and rail-truck transfer facilities as well as diesel engine retrofits for trucks and the SmartWay Upgrade Kit. We understand that limited funds were used for the engine retrofits and SmartWay kits despite significant interest by the trucking community. This low-cost loan program would result in substantial environmental and economic benefits. **The MTSNAC encourages the Secretary to continue this program and make appropriate funds available to encourage continued private investment in a newer, cleaner truck fleet.**

- The Transportation Infrastructure Finance and Innovation Act (TIFIA) was amended in SAFETEA-LU to expand program eligibility to include public freight rail facilities or private freight rail facilities providing benefit to highway users; intermodal freight transfer facilities; and, access to any of these facilities. Additionally, the minimum project size was reduced. These were justified and widely supported changes to the TIFIA
program. However there is some evidence that further improvements are warranted. For example, MARAD has explored how TIFIA could assist in the financing of Marine Highway infrastructure but current limitations do not make that feasible. The changes in SAFETEA-LU offer potential benefit to areas of the MTS. The MTSNAC recommends that the Secretary assess the experience since those changes were adopted and make recommendations for any further modifications to ensure that TIFIA is being put to full, productive use in support of the MTS infrastructure requirements.

- The Railroad Rehabilitation & Improvement Financing loan program (RRIF) provides benefit to railroads serving as MTS intermodal connectors, among others. The MTSNAC understands that there have been a number of administrative problems that have made the program difficult to use and concern has been raised that proposed regulations issued in June 2008 would only make things more difficult. The Secretary is requested to direct the Federal Railroad Administration (FRA) to resolve the administrative problems and work to ensure that the final regulations make the program easier to use.

Recommendation 6: Support efforts to recruit, train and retain sufficient personnel.

The advantages of infrastructure improvement will be lost if the workforce that operates it is insufficient or inadequate. Maritime transportation continues to grow and that growth continues to create new jobs, many of which provide higher earnings capability than jobs available in other sectors. Skilled workers such as merchant mariners in the offshore and inland sectors, stevedores and longshoremen, ship support and machine repair workers, long and short-haul truck drivers, railroad workers, and warehouse and logistics personnel are all part of the MTS supply-chain workforce. Strategies for promoting the intermodal goods movement system then, should necessarily include a workforce training and education component.

Workforce training needs vary widely depending on job requirements and can range from a few months of technical certification to four year baccalaureates. In terms of recruitment, industry operators have routinely called for a national public relations effort—perhaps administered by the DOT in consultation with the Departments of Labor and Education—that would:
• increase the awareness and interest of the public and recent high school graduates in transportation trades

• increase the number of high schools across the nation offering transportation curricula

• increase enrollment in transportation trade schools; and in specialized transportation programs at our colleges and universities

In order to attract sustainable funding, successful programs must connect trained workers with good jobs. A formal path to employment should be included in the metrics used by the DOT to evaluate the likelihood of success and the suitability of funding.

The particularly successful model of high school career-to-work and other technical programs deserve further development. In certain districts where such programs are already flourishing, great gains can be made by standardizing curriculum, funding equipment and facility acquisitions, and bridging funding gaps for expansion. **Technical courses and trade schools should be identified and recognized by the Department of Transportation.** The Department should consider creation of a workforce development group with the Departments of Labor and Education (perhaps modeled on the successful Office of Maritime Workforce Development recently created in the Maritime Administration) where the best practices of transportation training might be coordinated on a national scale.

The following snapshots outline industry manpower issues by sector:

**Maritime:** In keeping with several recent industry studies, a new “Maritime Operator Survey Concerning Mariner Availability” conducted by MARAD in 2007 determined that the U.S. maritime industry has a widespread and far-reaching recruitment and retention problem. A great majority of the respondents attempted to hire mariners over the past year, but almost three-quarters of them encountered problems in recruitment. Almost half of the respondents reported that they had difficulty hiring licensed deck officers and just over one-quarter had problems hiring unlicensed deck personnel. Over half of all respondents indicated that they have experienced some degree of difficulty retaining mariners over the past year.

The new and continuing impact of domestic and international regulations present major barriers to entry for new mariners and to the continued training and advancement of existing mariners. Most notable are the TSA’s Transportation Workers Identification Card or TWIC and the IMO’s Standards of Training, Certification and Watchkeeping or the
STCW Convention. Industry experts agree that these regulations have transformed maritime training and recruitment and have negatively affected the depth and elasticity of the labor pool in the near-term. Most industry experts agree that the impact will persist and perhaps accelerate. Detailed manpower studies are available at www.socp.org.

**Trucking:** The shortage of professional long-haul truck drivers and finding an effective means of recruiting them is a major issue for the motor carrier industry. A May 2005 study commissioned by ATA found that the long-haul, heavy-duty truck transportation industry in the United States is experiencing a national shortage of 20,000 truck drivers. An aging workforce combined with a decline in the primary demographic group that comprises the bulk of the driver pool has many fleets unable to seat trucks or add capacity. If current demographic trends continue, that shortage of long-haul truck drivers could increase to 111,000 by 2014. A detailed manpower study is available at http://www.truckline.com/priorityissues/drivershortage/index

**Shoreside ship support and repair:** U.S. shipyards and other marine support and repair businesses have indicated that they are concerned about replacing an ageing but highly skilled workforce. Skills categories include shipwrights, marine hydraulics, marine electronics, marine welding and fitting, marine refrigeration, crane maintenance and marine diesel. Many of these crafts are unionized and have mature apprenticeship programs. But attracting younger workers might require high school pre-apprenticeship programs or community college programs or a partnership between both.

**Potential Roles for the US DOT in Addressing the Problem**

- **Support for transportation apprenticeship programs**

  Adverse demographic trends coupled with new certification and identification regulations has made maritime and shore side apprenticeship programs essential to maintaining a qualified workforce. An engaged DOT, informed by industry, could have an enormous impact on the development of new programs and the expansion of existing ones.

- **Focused regional training**

  A regional approach would connect MTS industry employers with transportation trade schools, union apprenticeship coordinators, K-12 education, community colleges and community based organizations to develop curriculum and programs that meet the particular needs specific to each port or region of ports.
Regionalizing the program design was successful in the West Coast development of the Pacific Coast Maritime Consortium, for example. In that case, a group of maritime employers and unions with operations in all five Pacific states joined to attract government funding through the Workforce Investment Act to address similar training problems.

- **Workforce Development Department**

  The creation of a workforce development department could coordinate industry input, develop standard curriculums, and explore funding mechanisms such as educational loan programs for the transportation industry. Using the U.S. Department of Labor’s Secretary’s Discretionary Program as a model, for example, could adjust off-the-shelf answers for the transportation workforce.

| Recommendation 7: Reduce the environmental impact of the marine transportation system. |

The nation’s ports, shipping channels, terminals, shore side facilities and corridors operate within a valuable ecosystem of natural and cultural resources. Ports are trustees of both the natural, as well as economic, resources under the doctrine of the public trust and as such have an obligation to manage and care for these resources. The port and related marine facilities complex plays a vital role in serving their communities both for economic benefits and jobs but also in preventing damage to these environmental assets for public health and recreation. Ports and state governments have demonstrated an increasing willingness to impose restrictions, fees and other mechanisms designed to protect these assets.

The vast majority of vessels engaged in maritime commerce operate in interstate and/or international commerce. The environmental issues arising from increased vessel usage include the introduction and spread of aquatic invasive species; air pollution from the burning of diesel fuel producing sulfur dioxide, nitrogen oxide and particulate matter emissions; and, carbon dioxide emissions that contribute to global climate change. Each of these issues needs to be addressed through uniform, national or international standards, rather than a patchwork of approaches that may vary by port, city or state.

Additionally, **the Environmental Impact Review process must be streamlined and expedited**. The MTSNAC strongly supports the need to mitigate the environmental impact of MTS related projects and endorses project plans that incorporate mitigation steps from the outset. However, even projects that would improve efficiency and therefore reduce negative effects to the environment are met with
lengthy delays. These delays add significantly to project cost and delay delivery of environmental benefits to the community.

The MTSNAC recognizes that the National Dredging Team (NDT), which is co-chaired by the U.S. EPA and the U.S. ACE, was created to address inefficiencies in the dredging process from permitting to dredge material management. The NDT reports that there have been improved efficiencies in the EIR process for dredging projects as a result of their work. Similar improvements are needed for other projects in the MTS.

To avoid potential environmental degradation and local public opposition to land-side marine transportation infrastructure growth, there is a need to better integrate environmental stewardship and mitigation into the routine planning process for marine system transportation improvements. Some potential actions include:

- Establish uniform, environmentally effective, national regulations based on international standards where applicable.
- Evaluate the potential to use alternative energy sources (e.g. wind, solar, electric, natural gas, etc.)
- Pursue advanced engine and fuel technology alternatives for vessels, locomotives, terminal equipment, such as electrification, hybrids, plug-in hybrids, electric, hydrogen fuel cell, and clean diesel converted from natural gas and coal.
- Increase opportunities for stewardship through local, state, federal and private collaboration in project development and approval
- Identify and promote Best Management Practices, e.g. AAPA Environmental Handbook, chassis pools, street-turns, etc.
- Identify and encourage smart planning approaches that locate MTS infrastructure and freight support services, such as truck maintenance facilities, in proximity to the port and each other. (e.g. the concept of a freight village)

Competing demands for marine transportation system improvements, environmental protection and the public expectations for each continues to challenge the success of a nationwide system improvement strategy. **MTSNAC requests the Secretary to request the agency partners of CMTS to support balanced and uniform regulation of the MTS.**
Recommendation 8: Support the continued development of a marine highway system as it will be needed to accommodate future freight and passenger volume.

A lesson learned in recent years is the importance of diversification and redundancy in the nation’s transportation system. Highway accidents that destroyed concrete and steel and closed the I-95 corridor in Bridgeport and in Philadelphia illustrated the importance of alternate routes for interstate travel. Some truck moves have shifted to rail to reduce road congestion in certain corridors. Fuel prices and greenhouse gas concerns are prompting logisticians, businesses and policy leaders to improve transportation efficiency and mitigate the environmental impact of transportation. Use of more marine highway transport in coastal and inland regions supports these objectives.

The Marine Transportation System handles approximately one billion tons of domestic waterborne commerce in addition to the millions of commuter, recreational and international passengers also traveling on the nation’s waterways. However, historically this cargo volume has been predominantly oriented to the bulk and break bulk markets. It is an established market but one that represents a limited utilization of an extensive system that offers an efficient mode of transport for other markets.

In the Energy Independence and Security Act of 2007 (P.L. 110-140) Congress directed the Department of Transportation to establish a short-sea transportation (SST) program and designate SST routes “as extensions of the surface transportation system.” “Marine highways” should be regarded as part of the surface transportation system along with roadways and railways. The law directs U.S. DOT to work with states, regions and other entities to develop strategies to encourage SST development. SST routes could serve as an alternative to trucking on congested highways or as a freight ferry that crosses an inland river or coastal harbor. This is not a new concept in federal policy. Publicly sponsored passenger ferry service connecting to the interstate highway system has been supported through capital grants to states since at least 1991.

The U.S. DOT recently published an interim final rule for implementation of the SST program. (73 Fed. Reg. 59,530, Oct. 9, 2008) In accordance with that rule, MARAD is seeking to establish short-sea transportation routes to be designated as Marine Highway Corridors and will be accepting applications to participate in short-sea transportation projects.

Clearly, it is time to more fully develop the marine highway option for domestic intermodal and Ro/Ro operations as directed in P.L. 110-140.
However, the MTSNAC strongly urges the Secretary to complete a quantitative evaluation of the market demand and determine on what routes short-sea shipping is an economically viable option. Such an evaluation should also identify the weaknesses in the inland and coastal waterway infrastructure or facility operations that discourage efficient use of marine transportation.

With that analysis in hand, a more effective plan can be developed. Some elements of a short-sea transportation program that the Secretary might consider are:

- **Extend the proposal** (as introduced in legislation in the 110th Congress) to exempt certain intermodal cargo moving on the Great Lakes and St. Lawrence Seaway System from the Harbor Maintenance Tax to apply to all intermodal cargo in U.S. coastwise service. Such exemption would include transshipped international cargo that currently is subject to double taxation. We appreciate the work of Secretary Peters to use the CMTS to develop and vet the “views and estimates” letter from the Administration to Congress in support of such an exemption.

- **Support budget funding for five years at levels fully sufficient to implement the terms of the SST provisions of the Energy Independence and Security Act.** Funded activities should include the support of SST projects, encouraging states, metropolitan planning organizations (MPOs) and other entities to consider water transportation alternatives, and research as outlined in the Act and support the human and financial resources needed to undertake the short-sea transportation mission that Congress has given.

- **Allow states and multi-state entities to designate water routes as part of the national highway system.** Precedent is found in the State of Alaska, which designated a water route the Alaskan Marine Highway.

- **Encourage states and MPOs, to consider the feasibility of parallel water routes when evaluating new capacity options for major transportation corridors.**

- **Support the training of transportation planners and engineers so they will more easily understand how and when to apply water transportation solutions.** Help make available marine highway technical assistance for public transportation agencies.

- **Give the Maritime Administration the human and financial resources needed to undertake the short sea transportation mission Congress has given it.**
• Develop strategies for increasing marine transportation options on the inland waterway system in addition to the coastal regions.

• Encourage short term incentives for use of water routes where they are available. Such limited incentives might stimulate potential users to explore whether the marine transportation system would suit their logistics requirements.

• Support funding of the existing Title XI loan guarantee program that can serve the marine highway vessel market and encourage use of newly available capital construction funds for the building of new U.S. ships qualified to serve this market.

• Establish a freight ferry program to connect and extend elements of the interstate highway system where marine route alternatives are commercially feasible. Model it on the existing ferryboat program with features that are appropriate to freight operations and public-private partnership arrangements typical in marine transportation. It also can complement the Short Sea Transportation provisions of P.L. 110-140, the Energy Independence and Security Act of 2007.

• Create a consultation board that includes a broad range of stakeholders, including private sector, non-federal and non-DOT stakeholders. It is impractical to presume that needed infrastructure and service support for the development of this market will happen from within DOT only.

Recommendation 9: Assert federal jurisdiction over interstate and foreign commerce and provide transportation service providers with uniform, national standards and regulations.

Most of the 2.5 billion tons of cargo moving in the U.S. waterborne trades is moving in interstate and/or international commerce. As such, service providers and other system users need uniform, national standards applicable to the entire Marine Transportation System and consistent with the other components of national transportation system. Absent uniform, national standards issued at a federal level, MTS users are increasingly faced with the likelihood of numerous, disparate state and local regulations.

The problem associated with clear chassis safety and liability regulations has plagued MTS users and services providers for decades. The passage of SAFETEA-LU, in August 2005, mandated that the Federal Motor Carrier Safety Administration (FMCSA), develop a new regulatory regime. We are pleased to see that the FMCSA
finally issued the Requirements for Intermodal Equipment Providers and Motor Carriers and Drivers Operating Intermodal Equipment, better known as the “Roadability” Regulations, in December 2008. As a result of this rulemaking, ocean carriers, railroads, chassis pool operators and other Intermodal Equipment Providers (IEPs) will for the first time be subject to the Federal Motor Carrier Safety Regulations.

The regulations are scheduled to go into effect in June 2009 and it is important to adhere to that date. Therefore, the Secretary is urged to ensure that these regulations are implemented according to the current schedule and not further delayed.

Another area of concern is the potential inconsistency and impracticality of disparate environmental standards. This issue is also discussed in Recommendation 7 and its importance warrants repeating here.

The Secretary should seek endorsement by the CMTS, and work closely with Congress and other Agencies, to ensure that uniform national environmental standards are in place for equipment used to handle and transport goods on the nation’s transportation system, including ships, trucks, and trains. Further, the Secretary should work to ensure that states adhere to the national standards and are pre-empted from taking individual actions.

The third area of concern involves the TWIC program. MTSNAC members strongly support increased security measures at our ports and the concept of the TWIC program is generally well endorsed. However, the roll-out has been fraught with delays and other problems so the full impact of complete implementation remains unknown. Further, the TWIC program does not pre-empt states and local governments from establishing their own similar programs and concerns have already been raised about the cost and coordination or multiple programs.

Therefore, we request that the Secretary closely monitor TWIC implementation and ensure that the introduction of this process does not disrupt the flow of commerce. We encourage the Secretary to use CMTS and other forums to ensure the TWIC implementation does not negatively impact MTS activity.

**Recommendation 10: Ensure the adequacy and sustainability of intermodal connectors.**

Intermodal connectors are short -- but essential -- links that connect America’s most important seaports, airports, rail yards, barge facilities and pipelines to the National Highway System (NHS), a 161,000-mile network that includes the interstate system and other key roads.

The study, completed in 2000, identified 616 intermodal freight terminals accessed by 1,222 miles of NHS connectors.\(^{11}\) It is notable that although these connectors are less than 1% of the total NHS mileage, they carry a significant proportion of total freight volumes. The study went on to point out that:

- NHS connectors are short, averaging less than two miles in length.

- They are usually local, county or city streets, and they generally are held to lower design standards than are mainline NHS routes, which are primarily interstate and major highways.

- Intermodal connectors serve heavy truck volumes moving between intermodal freight terminals and mainline NHS routes, primarily in major metropolitan areas.

- They typically provide this service in older, industrialized and other mixed land use areas, where there are often physical constraints or undesirable community impacts.

While this study provides some helpful perspective, it is now almost ten years old. Additionally, it does not provide a comprehensive picture of the national freight system and the MTSNAC can find no evidence that a complete picture depicting all modes and connectors exists anywhere at the federal level. Therefore, the MTSNAC recommends that such a picture be developed and maintained, including updated information on the intermodal freight connectors as a critical component of national policy development. This could be an important project assigned to the Office of Intermodalism, the role of which is discussed further in Recommendation 11.

Connectors need adequate funding. Unfortunately, connectors tend to be orphaned in the planning and financing process, because they are not the specific domain of any of the legacy modal interest groups. Further, because they are short and represent such a small percentage of the total NHS network, there importance to the NHS is often overlooked by states and local governments in the planning process. Frequently, funds are limited, and a connector is considered

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“someone else’s problem.” Moreover, since many of these multi-modal interchanges are relatively new (in an historical sense) to the freight industry, they become an afterthought in the planning process.

Because intermodal connectors play an essential role language was developed for SAFETEA-LU that committed 2% of National Highway System funds to intermodal connectors. However, that language was removed in a conference committee and never became part of the final legislation. We recommend that dedicated and predictable funding for intermodal connectors be established. In the interim, the Secretary of Transportation should determine the most important intermodal connectors for the nation and engage the state departments of transportation to ensure that the needs of those connectors are adequately addressed in the state transportation plans.

Connectors need to be considered in a broader, more holistic context. Intermodal connectors are essential pieces of infrastructure which support multi-modal transportation. Thus, they could be: rail connections from ports to mainline routes; waterways that support barge movement; or, bridges that span ports to connect terminal roadways with NHS highways. We submit that intermodal services are “virtual connectors” which are consistent with the original vision of ISTEA: “to develop a National Intermodal Transportation System that is economically efficient, environmentally sound, provides the foundation for the nation to compete in the global economy and will move people and goods in an energy efficient manner.”

Intermodal movements have the ability to leverage the freight network. Leverage, in the sense that we are using it, multiplies the capacity of existing modal infrastructure in a way which is not possible with legacy or conventional usage of these assets. Recognizing the importance of intermodal connectors, and expanding their definition, is integral to gaining this additional capacity quickly and at a lower cost.

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<table>
<thead>
<tr>
<th>Intermodal Connector?</th>
<th>Today</th>
<th>Tomorrow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public roads leading to</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>major intermodal terminals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private roads leading to</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>major intermodal terminals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridges in intermodal area</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Intermodal ITS projects</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Intermodal rail terminals</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Near-dock rail facilities</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Inland and coastal waterways</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Air cargo facilities</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Multimodal logistics parks</td>
<td>No</td>
<td>Yes</td>
</tr>
</tbody>
</table>

An intermodal network is an integrated transportation system consisting of two or more modes connected through facilities which allow freight (and/or travelers) to transfer from one mode to another during a trip from an origin to a destination. Freight moves through local, national, continental and international networks. These networks are, by definition, intertwined to the point where the constriction of any single “node” in the network, impacts the entire network.

An expansion of the intermodal connector definition could well help achieve more efficient freight infrastructure. Despite their national significance, most intermodal connectors historically have lacked proponents other than supporters from the localities which contain the connectors. In the same way that a foundation must be planned and funded before the house can be built, **intermodal connectors must be considered, defined and funded before any major infrastructure project can be viable and we therefore request that the Secretary direct FHWA and MARAD to address this issue.**

To improve utilization of intermodal connectors, continued steps must be taken by all stakeholders to increase the utilization of the existing system. One successful initiative, which was endorsed by the MTSNAC in its last report, is to **move more cargo in and out of ports during off-peak hours**, and better utilize available road capacity. Currently, most intermodal movement to and from container ports, still occurs during the normal work day, when roads are most congested. PierPASS, a program launched to encourage off-peak movement in Southern California, has resulted in increased activity outside the normal work day hours. The program has since been emulated at other ports. Implementing such a change requires the cooperation of all
stakeholders, as it implies greater costs to some. Enhanced data visibility amongst all participants would facilitate additional system efficiencies.

In order for programs extending marine terminal hours to work, warehouses must be willing to extend the hours they will be available to receive cargo and truckers must adjust their work days to take advantage of the new schedule. Should local ordinances prohibit implementing such a program, modifications should be pursued through active cooperation between private sector supply chain participants and local government. The Secretary should direct MARAD to identify these impediments through its Gateway Offices and engage local stakeholders to implement solutions.

Finally, on-dock rail needs to be managed as part of the intermodal process. The on-dock rail move serves as the “connector” between vessel transportation and rail transportation just as the truck move serves as the “connector” between vessel and rail transportation in an off-dock move. Although the on-dock move gives the appearance of a more efficient connector, there are improvements that can be made. Today, an inbound container is discharged from the vessel and comes to a point-of-rest somewhere within the marine terminal. Subsequently, that import container is taken from its first point-of-rest and loaded to a rail car stationed elsewhere on the terminal.

In a perfect world, the rail operation would be adjacent to the quay and the vessel crane would handle a container directly to or from the rail car. This goal is difficult to achieve because train loading often waits on vessel discharges to accumulate enough critical mass for specific destinations and because a single vessel shared by multiple partners can have varied commercial priorities. Nevertheless, efforts to achieve this “perfect world” must continue because the result could be a dramatic increase in effective terminal capacity without the need for more land.

With the elimination of the intermediate point-of-rest move, the amount of space required for on-dock could thus be reduced by as much as 60-90%. And the amount of space available in some terminals could increase by 15-40% as the need to dedicate scarce land to store empty rail cars diminishes. Given the limited availability of terminal land, the resulting operation would be vastly more flexible and fluid.
Recommendation 11: Re-establish the Office of Intermodalism within the Office of the Secretary of Transportation and hire modal specialists within the Office of Policy to support the effort.

Most of the goods moving in the MTS are intermodal. They are transported part of the way by water and then by truck or rail. The need for seamless connectivity is paramount and must be coordinated across modes. This was recognized in 1991 when the duties of the Secretary of Transportation were expanded to add:

Coordinate Federal policy on intermodal transportation and initiate policies and programs, and make recommendations to the President and Congress for their consideration and implementation.13

The legislation that established this duty (H.R. 2950) also created an Intermodal Transportation Advisory Board to be chaired by the Secretary and the Administrators of the Federal Highway Administration, the Federal Aviation Administration, the Maritime Administration, the Federal Railroad Administration and the Federal Transit Administration.

The legislation went further and established an Office of Intermodalism within the Office of the Secretary to carry out the new duties described above and to provide support to the Advisory Board.

These changes were strongly supported by both public and private stakeholders who long expressed a need for policy coordination across modes for intermodal freight and passenger movement. Placing this responsibility in the Office of the Secretary helped ensure that decisions or projects that would affect intermodal transportation received the proper attention.

In 2004, legislation was passed to create the Research and Innovative Technology Administration (RITA) within the Department of Transportation.14 For reasons not entirely clear to MTSNAC members, the new law also provided that the Office of Intermodalism was to move out of the Secretary’s Office and into RITA. Assurances were provided that the Office of Intermodalism would continue in its important role. Those assurances were bolstered by expanded responsibilities assigned in SAFETEA-LU15. These added responsibilities can be summarized as follows:

13 49USC301 (3)
14 See H.R. 5163, the Norman Y. Mineta Research and Special Programs Improvement Act.
15 (Pub. L. 109-59, Sec. 4149 (f)
The Director, in consultation with the advisory board previously established and other public and private transportation interests shall develop a plan to improve the national intermodal transportation system.

The Director shall submit an initial report on the plan to Congress 2 years after the enactment of SAFETEA-LU, which meant the first report was due in August 2007. A follow-up report will due in August 2009.

The Director and the Director of the Bureau of Transportation Statistics shall jointly develop, in consultation with modal administrations, state and local planning organizations common measures to compare transportation investment decisions across modes of transportation.

Today, members of the MTSNAC can find no evidence that any of these responsibilities have been fulfilled. Further, a review of RITA’s website (http://www.rita.dot.gov/) as well as the Federal Yellow Book reveals that the Office of Intermodalism does not appear to exist at all anymore. Additionally, there is no reference to the duty to coordinate federal policy on intermodal transportation in the Agency’s description. We believe this is inconsistent with the law as it was written and with its intent. We also note that freight transportation expertise is no longer present within the Office of the Secretary.

The MTSNAC represents stakeholders in all sectors of transportation, including service providers, system users and state and local governments. Much additional input was received from additional stakeholders across the country regarding this recommendation. The strong consensus view is that the Office of Intermodalism provided value when it was in the Office of the Secretary. Therefore, it needs to be re-established therein with appropriate funding to carry out the duties that have been assigned to it.

Additionally, the proposed rules for the newly established Projects of National and Regional Significance (PNRS) calls for the Secretary to evaluate applications and make recommendations for the allocation of funds. Given the defined role of the Office of Intermodalism, that office would be an ideal owner of the PNRS program as part of its responsibilities within the Office of the Secretary.

Further, much of the nation’s freight movement is intermodal; representing use of more than one mode to transport the goods from origin to destination. As such, the Office of Intermodalism would be an appropriate owner of the National Freight Policy outlined in Recommendation 12.
The Office of Intermodalism could play a meaningful role in identifying and prioritizing intermodal connectors, which should be incorporated into the National Freight Policy.

Lastly, the Office of Intermodalism is the appropriate place to develop and maintain the comprehensive picture of the national freight system discussed in Recommendation 10.

**Recommendation 12: Re-energize, complete and utilize the National Freight Policy Framework.**

U.S. personal expenditures on goods reached almost $4 trillion in 2007, representing over 28 percent of the nation’s Gross Domestic Product (GDP.) This is a trend that has existed for some time and it was the recognition of the economic importance of goods or freight movement that lead the U.S. DOT to embark upon a systematic approach to developing a National Freight Policy several years ago.

The economic impact of goods movement certainly creates the most compelling reason for the need to have a national policy to address it. In addition, the complexity of finding solutions for freight movement, which generally occurs on the same roads, railways and waterways as passenger and personal vehicle movement, demands a comprehensive approach.

The initiative began in earnest in 2005 and the policy framework as well as a process for implementing it was developed through well-thought-out collaboration among the USDOT, many users of the transportation system and academia. The result was a Framework for a National Freight Policy, which is “a joint effort of the U.S. Department of Transportation and its partners in the public and private sectors to inventory existing and proposed strategies, tactics, and activities to improve freight transportation.”

In 2006, The Freight Stakeholders Coalition, representing a broad cross-section of interested organizations (many of whom are also members of the MTSNAC), formally thanked the USDOT for its efforts on the Framework and pledged support to continue to work jointly on its development. It should also be noted that this policy is important for international trade as well.

At some point, the USDOT seemed to lose interest in continuing the Framework for Freight Policy process – perhaps because freight expertise within the Office of the Secretary dwindled - and nothing comparable was introduced in its place. We recognize that the USDOT

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16 U.S. Department of Commerce, Bureau of Economic Analysis, National Economic Accounts, National Income and Product Accounts Table 1.1.5
has many initiatives underway and we view a National Freight Policy Framework as a meaningful way to bring those initiatives together. It provides a multi-modal plan that incorporates both public and private sector issues and initiatives. It provides the federal government with a single framework for national goods movement planning. The MTSNAC recommends that the National Freight Policy Framework, or some similar process, be re-activated in the Office of Intermodalism to ensure comprehensive goods movement planning. Additionally, since maritime transportation plays an important role in the movement of freight, the Secretary should fully engage MTS stakeholders and require states to include the maritime sector in their transportation plans.
Funding the Marine Transportation System

The Marine Transportation System (MTS) does not have a single owner; components are owned and operated by both the public and private sectors.

Understanding System Ownership

The table below illustrates the components of the Marine Transportation System (MTS) and clearly evidences the ownership complexity. Only about half of its components are owned by the public sector and fewer still are owned by the federal government. As owners are responsible to fund their sectors’ needs, this means that the federal government has limited responsibility for funding the MTS. However, if that responsibility is not acted upon, the entire MTS is placed in danger of failing and such failure would cripple the nation’s economy.

Further, the federal government in general, and the Department of Transportation in particular, should play an active role in expediting permits for projects benefiting the MTS. The table reflects where the need for this is greatest and the subject of expeditious environmental reviews is discussed in greater detail under Recommendation 7.

<table>
<thead>
<tr>
<th>Sector</th>
<th>Ownership</th>
<th>Funding Problem</th>
<th>Capacity Problem</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inland Waterway Conveyances (tugs and barges)</td>
<td>Private</td>
<td>No</td>
<td>No</td>
<td>Trust fund is inadequate and must be supplemented. Operations and Maintenance funding is not supported by the trust fund or adequate funding.</td>
</tr>
<tr>
<td>Inland Waterway Locks and Dams Infrastructure</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Sector</td>
<td>Ownership</td>
<td>Funding Problem</td>
<td>Capacity Problem</td>
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<tr>
<td>--------------------------------------------</td>
<td>---------------</td>
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<td>------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Trucking Conveyances (trucks and equipment)</td>
<td>Private</td>
<td>No</td>
<td>No</td>
<td>Federal programs where funds have been made available for truck engine retrofits (e.g. CMAQ, PAB’s, etc.) must be made available. Safety and efficiency could impact capacity.</td>
</tr>
<tr>
<td>Highway Infrastructure</td>
<td>Public</td>
<td>Yes</td>
<td>Yes</td>
<td>The public sector has been under investing for decades. The current level of funding is insufficient to address the need forcing equally meritorious projects to compete for the limited funds.</td>
</tr>
<tr>
<td>Maritime Conveyances (ships)</td>
<td>Private</td>
<td>No, if federal programs maintained for U.S. ships</td>
<td>No</td>
<td>Sustain Title XI and the Capital Construction Fund program to ensure available capital for U.S. domestic ships, including new marine highway vessels. Ensure funding is available for new entrants to short-sea shipping.</td>
</tr>
<tr>
<td>Harbor Dredging and Harbor Channel construction</td>
<td>Public</td>
<td>Yes, Location Specific</td>
<td>Yes, location specific</td>
<td>The existing trust fund which supports Operations and Maintenance is adequate if money in it is spent as intended, which has not been the case for some time. Harbor channel construction has historically been under budgeted and under funded. Channel deepening is needed at some ports to accommodate larger vessels.</td>
</tr>
<tr>
<td>Port and Marine Terminal Infrastructure (inside the gate)</td>
<td>Combination of public and private</td>
<td>No</td>
<td>Yes, location specific</td>
<td>Ports and private companies can generally secure needed capital however the federal security grant program should be maintained. More expedient permit approval is needed as delays add costs. Available land is limited so capacity increase is dependent upon efficiency improvements.</td>
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<tr>
<td>Sector</td>
<td>Ownership</td>
<td>Funding Problem</td>
<td>Capacity Problem</td>
<td>Comments</td>
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<tr>
<td>Rail Connections to Ports</td>
<td>Most private, some public</td>
<td>Yes, location specific</td>
<td>Yes, location specific</td>
<td>Some projects require direct government involvement, like FAST Corridor, Alameda Corridor, etc. Many projects require publicly-funded highway-rail grade separations for the otherwise private rail connection to work effectively. The federal RRIF program needs to be simplified.</td>
</tr>
<tr>
<td>Highway Connections to Ports</td>
<td>Public</td>
<td>Yes, location specific</td>
<td>Yes, location specific</td>
<td>It is critical that highways and bridges connecting ports to the rest of the system receive high priority for public funds. Failure to do so jeopard the U.S. economy.</td>
</tr>
<tr>
<td>Rail Conveyances (locomotives and rail cars)</td>
<td>Private</td>
<td>Yes, Location Specific</td>
<td>No</td>
<td>These conveyances are generally privately owned by the railroads and as such the railroads determine what to invest.</td>
</tr>
<tr>
<td>Rail Trackage</td>
<td>Most private, some public</td>
<td>Yes, location specific</td>
<td>Yes, location specific</td>
<td>Although most trackage is privately owned, government assistance could be needed in certain locations where track is publicly owned (e.g. certain areas of the North East.)</td>
</tr>
<tr>
<td>Aids to Navigation</td>
<td>Public and private</td>
<td>No</td>
<td>No</td>
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In summary, the federal government needs to take the lead role in ensuring adequate funding, and placing high priority on projects that keep our deep water ports and coastal inland waterways operational. This means focusing on the water *and* the roads, railways and pipelines connecting to the water. **This requires adequate funds in the Inland Waterways Trust Fund and the Harbor Maintenance Trust Fund and** that those funds are used only for their intended purpose. **It further requires appropriate funding for inland waterways operations and maintenance and for**
harbor channel construction, each of which has been historically under-budgeted and under-funded.

The highways and bridges that provide connections to the ports do not receive appropriate priority when competing for limited funds. These intermodal connectors are discussed more thoroughly in Recommendation 10.

Members of the MTSNAC recognize that there is a deficit of funds necessary to meet the requirements of the nation’s highway system and that simply relying on the current federal gas tax, at the current tax rate, will not produce the revenue required now and into the future. In preparation for the next surface transportation bill, a number of concepts are being introduced as possible sources of additional federal highway money. These include raising the existing gas tax, more tolling, more congestion pricing, new local user fees, new national user fees and other new taxes.

Users of the marine transportation system generally do not have dedicated roads and bridges providing land-side access. They are the same roads and bridges used by those transporting freight between two land-based facilities, and they are the same roads and bridges used by passenger vehicles. However, a number of proposals for new fees specifically target maritime commerce only as a way to pay for road improvements that will benefit all users. Users of the marine transportation system recognize that they will have to contribute to new revenue programs if the system needs are to be met. However, MTS users should not be penalized or inequitably burdened with the obligation of providing new revenue. New user fees, if introduced, need to apply to all users equitably because all users will benefit from improvements enabled by the new revenue.
Conclusion

Action is needed.

The MTSNAC members have worked on the development of this report for almost a year. The report content represents the consensus view of a broad range of diverse stakeholders supplemented by independent research and interviews with other interested parties in both the public and private sectors.

The primary goal in developing this report was to provide recommendations that could be acted upon by the Secretary expeditiously; that once enacted would produce measureable and meaningful value for the MTS; and, that represented the consensus view of all stakeholders. The resulting twelve recommendations include over 50 action items, which we hope the Secretary will incorporate into the work plan for the Department of Transportation in 2009 and beyond.

We recognize that the content of this report is not a comprehensive business plan that includes all of the actions the federal government should take to improve the Marine Transportation System. We commend the Committee on the Marine Transportation System for developing the National Strategy for the Marine Transportation System and the Maritime Administration for developing A Vision for the 21st Century for the MTS. We are pleased that all of the MTSNAC recommendations are consistent with the objectives outlined in these strategy documents.

Therefore, the MTSNAC respectfully urges the Secretary of Transportation to assign accountability for the actions outlined in this report and monitor progress until the actions are completed. It is our strong belief that inaction is not an option if we are to sustain and improve the nation’s Marine Transportation System.
# Marine Transportation System National Advisory Council Members

<table>
<thead>
<tr>
<th>Member Organization</th>
<th>Member</th>
<th>Alternates</th>
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<tbody>
<tr>
<td>Agricultural Transportation Coalition (AgTC)</td>
<td>Ms. Sheila Bracken, Allenburg Division Louis Dreyfus Cos.</td>
<td>Mr. Brian McGuire, Dunavant Enterprises, Inc.</td>
</tr>
<tr>
<td>Alliance of Automobile Manufacturers (AAM)</td>
<td>Mrs. Vicki L. Streukens, General Motors Corporation</td>
<td>Mr. Peter Friedmann, AgTC</td>
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<tr>
<td>American Association of Port Authorities (AAPA)</td>
<td>Mr. Kurt Nagle, AAPA</td>
<td>Mr. Michael Leone, Massachusetts Port Authority</td>
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<tr>
<td>American Association of State Highway &amp; Transportation Officials (AASHTO)</td>
<td>Mr. Leo Penne, AASHTO</td>
<td>Ms. Jean Godwin, AAPA</td>
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<tr>
<td>American Trucking Associations (ATA)</td>
<td>Mr. Curtis Whalen, Intermodal Motor Carriers Conference of the ATA</td>
<td>Mr. Martin Ross, ATA</td>
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<tr>
<td>American Association of Railroads (AAR)</td>
<td>Mr. John T. Gray, AAR</td>
<td>Mr. Frank N. Hardesty, AAR</td>
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<tr>
<td>Bay Planning Coalition (BPC)</td>
<td>Ms. Ellen Johnck, BPC</td>
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<tr>
<td>California Marine and Intermodal Transportation System Advisory Council (CALMITSAC)</td>
<td>Mr. Norman Fassler-Katz, California Senate Transportation Subcommittee on California Ports &amp; Goods Movement</td>
<td>Mr. James Fitzgerald, BNSF Railway</td>
</tr>
<tr>
<td>Center for Liquefied Natural Gas (CLNG)</td>
<td>Mr. Bob Salmon, Shell Trading (US) Company</td>
<td>Mr. Tony Galt, Suez LNG NA, LLC</td>
</tr>
<tr>
<td>Chamber of Marine Commerce (CMC)</td>
<td>Mr. Gregg Ward, Detroit-Windsor Truck Ferry, Inc.</td>
<td>Mr. Stephen Brooks, CMC</td>
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<td>Member Organization</td>
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<tr>
<td>Florida Ports Council</td>
<td>Mr. Val Schwec, Port of Fernandina</td>
<td>Dr. Richard D. Stewart, GLMRI</td>
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<td>Great Lakes Maritime Research Institute (GLMRI)</td>
<td>Ms. Carol Wolosz, GLMRI</td>
<td>Mr. John V. Keenan, Horizon Lines, LLC</td>
</tr>
<tr>
<td>Intermodal Transportation Institute, (ITI)</td>
<td>Mr. Theodore Prince, Director and Chairman, Research &amp; Policy Committee, ITI</td>
<td>Mr. Peter Peyton, Marine Clerks Association</td>
</tr>
<tr>
<td>International Longshore and Warehouse Union (ILWU)</td>
<td>Ms. Teri Mast, IBU of ILWU</td>
<td>Mr. Ingo Esders, ILA</td>
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<tr>
<td>International Longshoremen’s Association (ILA)</td>
<td>Mr. John Baker, ILA</td>
<td>Mr. Ingo Esders, ILA</td>
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<tr>
<td>National Association of Manufacturers (NAM)</td>
<td>Mr. Jon Hixson, Cargill</td>
<td>Mr. James L. Adams, American Commercial Lines</td>
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<tr>
<td>National Association of Waterfront Employers (NAWE)</td>
<td>Mr. Glenn Eddy, APM Terminals North America</td>
<td>Mr. Charles T. Carroll, NAWE</td>
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<tr>
<td>National Industrial Transportation League (NITL)</td>
<td>Mr. Peter J. Gatti, NITL</td>
<td>Mr. Michael B. Berzon, Mar-Log, Inc.</td>
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<td>National Waterways Conference (NWC)</td>
<td>Ms. Amy W. Larson, NWC Management Committee</td>
<td>Mr. Robert W. Portiss, Port of Catoosa</td>
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<tr>
<td>Pacific Maritime Association (PMA)</td>
<td>Mr. Stephen Hennessey, PMA</td>
<td>Mr. Robert Dodge, PMA</td>
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<tr>
<td>Passenger Vessel Association (PVA)</td>
<td>Mr. James C. DeSimone, Staten Island Ferry</td>
<td>Mr. Frederick Hall, The Bridgeport &amp; Port Jefferson Steamboat Co.</td>
</tr>
<tr>
<td>Permanent International Association of Navigation Congresses (PIANC)</td>
<td>Dr. Thomas H. Wakeman III, Stevens Institute of Technology</td>
<td>Mr. John Headland, Moffatt &amp; Nichol Engineers</td>
</tr>
<tr>
<td>Rahall Transportation Institute (RTI)</td>
<td>Mr. Dana Robertson, National Maritime Enhancement Institute</td>
<td>Mr. Bob Plymale, RTI</td>
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<tr>
<td>Retail Industry Leaders Association (RILA)</td>
<td>Mr. Rick Gabrielson, Target Corporation</td>
<td>Mr. Al Thompson, RILA</td>
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<tr>
<td>Sailors’ Union of the Pacific (SUP)</td>
<td>Mr. Gunnar Lundeberg, SUP</td>
<td>Mr. Dave Connolly, SUP&lt;br&gt;Ms. Berit Eriksson, Andrew&lt;br&gt;Furuseth School of Seamanship/SUP</td>
</tr>
<tr>
<td>Shipbuilders Council of America (SCA)</td>
<td>Mr. Herschel Vinyard, Atlantic Marine Holding Company</td>
<td>Mr. Matthew Paxton, SCA&lt;br&gt;Mr. Malcolm McLouth, Stottler, Stagg &amp; Associates</td>
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<tr>
<td>South Atlantic Marine Transportation System Organization (SAMTSO)</td>
<td>Mr. David White, SAMTSO</td>
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<tr>
<td>U.S. Chamber of Commerce</td>
<td>Mr. Sam Crane&lt;br&gt;<strong>MTSNAC Chairman</strong></td>
<td>Mr. James A. Capo, USMX&lt;br&gt;Ms. Carol Lambos, The Lambos Firm&lt;br&gt;<strong>MTSNAC Education Committee Co-Chairman</strong></td>
</tr>
<tr>
<td>United States Maritime Alliance, Ltd. (USMX)</td>
<td>Mr. Ole A. Sweedlund, USMX</td>
<td>Ms. Anne M. Kappel, WSC&lt;br&gt;<strong>MTSNAC Intermodal Committee Chairman &amp; MTNSAC 2009 Report Editor</strong></td>
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<tr>
<td>World Shipping Council (WSC)</td>
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<td>Mr. Christopher L. Koch, WSC</td>
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In addition to the input provided by the representatives of the member organizations listed above, the MTSNAC would also like to acknowledge and express gratitude for the many unnamed contributors who provided guidance and expertise during the development of this report.
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